

**ABSTRACT**

Security key distribution techniques using key rollover strategies for wireless networks are described. A number of keys are generated, usually by an access point. The present invention allows a standard mode and a mixed mode. In standard mode, each device on the network supports automatic key updates. In mixed mode, one or more devices on the wireless network require fixed keys. In both modes, a predetermined number of keys are determined and communicated to client devices that are accessing the wireless network. The predetermined number is determined so that a client device can miss a certain number of authentication periods without losing communication with the wireless network. Preferably, transmit keys used by an access point are different than the transmit keys used by the client devices that support automatic key updates.